

JUL 27 2001

K002336

Apex MewMini (EMS-II), EMS-V

Original Premarket 510(k) Notification

## SECTION 12: SUMMARY OF SAFETY AND EFFECTIVENESS

This 510(k) summary of safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and CFR 807.92.

### 12.1 SUBMITTER INFORMATION

- a. Company Name: APEX MEDICAL CO..
- b. Company Address: 10<sup>th</sup> FL., No. 31, Lane 169, Kang-Ning ST.  
His-Chin, Taipei Hsien, Taiwan.
- c. Company Phone: 886-2-26954122  
Company Facsimile: 886-2-26954123
- d. Contact Person: Daniel Lee
- e. Date Summary Prepared: July 26, 2000

### 12.2 DEVICE IDENTIFICATION

Trade/Proprietary Name: Electrical Muscle Stimulator MS104A and, EMS-V

Classification Name: Physical Medicine  
21 CFR 890.5890

### 12.3 IDENTIFICATION OF PREDICATE DEVICE

<u>Company</u>	<u>Device</u>	<u>510(k) No.</u>	<u>Date Cleared</u>
Electro Med Supply Inc.	MD-104. Power Muscle Stimulator	K872206	10/06/87
Skylark Device Co., Ltd.	EMS400	K912642	12/09/91

## 12.4 DEVICE DESCRIPTION

The APEX MS104A and EMS-V come equipped with a contraction and relaxation time setting and can be operated in different frequency and ramp setting mode. The MS104A and EMS-V also equipped with independent output power volume adjustment. The two models (MS104A and EMS-V) are same in design and all specification, but just different in outlook housing.

## 12.5 SUBSTANTIAL EQUIVALENCE

The APEX MS104A and EMS-V are substantially equivalent to the MD-104 in commercial distribution by Electro Med Supply Inc. And to the EMS400 in commercial distribution by the Skylark.

The fundamental technical characteristics of the APEX MS104A and EMS-V are similar to those of the predicate devices and are listed on the comparison charts provided in the 510(k) submission. The APEX MS 104A and EMS-V and the predicate devices function in the ramp, frequency setting. There are relaxation, contraction time setting capabilities with the APEX MS104A and EMS-V and the predicate devices. Output power adjustment features are present in all units.

## 12.6 INTENDED USE

The APEX MEDICAL CORP. Electronic Muscle Stimulator MS104A and EMS-V are intended for use in:

1. Relaxation of Muscle Spasm
2. Prevention or retardation of disuse atrophy
3. Increase local blood circulation
4. Muscle re-education.
5. Immediate post surgical stimulation of calf muscles to prevent venous thrombosis.
6. Maintaining or increasing range of motion.

This device is restricted to sale or used by or on the order of a physician licensed in the state in which he or she is practicing.

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## 12.7 TECHNOLOGICAL CHARACTERISTICS

A comparison of the technological characteristics of the APEX MS104A and EMS-V with the predicate devices is provided within this submission. They are composed of a main unit, output control, leadwires and electrode. Both adjustable power outputs are available with the APEX MS104A, EMS-V and the predicate devices. Ramp and frequency setting are also common to each of the units.

## 12.8 PERFORMANCE DATA

The APEX MS104A and EMS-V were subjected to performance bench testing in accordance with applicable industry and clinical standards. Physical performance studies were conducted to verify that the testing in accordance with applicable industry and clinical standards. Physical performance studies were conducted to verify that the APEX MS104A and EMS-V conformed to all emission and immunity standards in accordance with EN and IEC regulations. Results of the testing showed that the APEX MS104A and EMS-V perform as intended.

## 12.9 510(k) CHECKLIST

This notification contains all information required by 21 CFR 807.87.A completed copy of the Premarket Notification 510(k) Reviewer's Checklist is provided in this submission.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

**JUL 27 2001**

Mr. Daniel Lee, President  
Apex Medical Corp.  
10<sup>th</sup> Fl., No. 31, Lane 169, Kang Ning St.  
His Chih Chen, Taipei Hsien, 221, Taiwan, R.O.C.

Re: K002336/S002  
Trade/Device Name: APEX Electronic Muscle Stimulator: Models MS-104A and EMS-V  
Regulation Number: 21 CFR 890.5850  
Regulatory Class: II  
Product Codes: IPF  
Dated: May 19, 2001  
Received: May 22, 2001

Dear Mr. Lee:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish

further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4692. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "<http://www.fda.gov/cdrh/dsma/dsmamain.html>".

Sincerely yours,



Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative and  
Neurological Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

### Indications For Use

510(k) Number: K002336  
Device Name: APEX Electronic Muscle Stimulator MS-104A,  
EMS V  
Indication for Use: The APEX MEDICAL CORP. Electronic Muscle  
Stimulator MS-104A and EMS V are intended for  
use in:  
1. Relaxation of Muscle Spasm  
2. Prevention or retardation of disuse atrophy  
3. Increase local blood circulation  
4. Muscle re-education.  
5. Immediate post surgical stimulation of calf  
muscles to prevent venous thrombosis.  
6. Maintaining or increasing range of motion.  
This device is restricted to sale or used by or on  
the order of a physician licensed in the state in  
which he or she is practicing

(PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON ANOTHER  
PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

B. Mitchell MD for CDRH  
(Division Sign-Off)  
Division of General, Restorative  
and Neurological Devices

510(k) Number K002336

Prescription Use: ✓

OR

Over-The-Counter Use: \_\_\_\_\_